wherein

m and n, independently, are each 0-20,

k, l, q and r are each, independently, [is] 0 or 1,

R is [hydrogen, optionally] H, C_1-C_6-alkyl, OR^1-substituted C_1-C_6-alkyl or CH_2COOR^1,

R^1 is [hydrogen] H, C_1-C_6-alkyl or benzyl[,]; and

X is a hydrogen atom and/or a metal ion equivalent of an element of atomic number 21-29, 42, 44 or 57-83[,];

with the provisos that:

at least two of the substituents X represent a metal ion equivalent; [that]

one of the substituents Z^1 and Z^2 is hydrogen and the other is not hydrogen; [and that]

when n and l each are 0, then k and r are not each simultaneously 1; [that]

$-(O)_4-R$ is not -OH; [and that]

Z^1 and Z^2 are not $-CH_2-C_6H_4-O-CH_2-COOCH_2C_6H_5$, $-CH_2-C_6H_5$ or $-CH_2-C_6H_4-O-(CH_2)_5-COOCH_2C_6H_5$[,];

Z^1 is not phenyl when Z^2 is H; and

at least one of q and l is 1;

or a physiologically acceptable salt thereof with an inorganic and/or organic base, an amino acid or an amino acid amide.

Claim 4, line 2: Change "$CH_2-C_6H_4-OCH_3$, $-CH_2-C_6H_5$," to -- $-CH_2-C_6H_4-OCH_3$, --.

Claim 5, line 2: Change "$CH_2-C_6H_4-OCH_3$, $-CH_2-C_6H_5$," to -- $-CH_2-C_6H_4-OCH_3$, --.

6. **(Amended.)** A ~~compound~~ method of claim 1, wherein at least [one] three X [is] groups represent a Gd ion.

7. **(Amended.)** A ~~compound~~ method of claim 4, wherein at least [one] three X [is] groups represent a Gd ion.

8. **(Amended.)** A ~~compound~~ method of claim 5, wherein at least [one] three X [is] groups represent a Gd ion.

9. **(Amended.)** [Gadolinium] A compound of claim 1, wherein said compound is:

gadolinium complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-(4-methoxybenzyl)undecanedioic acid or a physiologically acceptable salt thereof;

europium complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-(4-methoxybenzyl)undecanedioic acid or a physiologically acceptable salt thereof;

iron(III) complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-(4-methoxybenzyl)undecanedioic acid or a physiologically acceptable salt thereof;

bismuth complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-(4-methoxybenzyl)undecanedioic acid or a physiologically acceptable salt thereof;

gadolinium complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-5-(4-methoxybenzyl)undecanedioic acid or a physiologically acceptable salt thereof;

gadolinium complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-[4-(4-methoxybenzyloxy)benzyl]undecanedioic acid or a physiologically acceptable salt thereof;

[gadolinium complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-benzylundecanedioic acid;

ytterbium complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-benzylundecanedioic acid;]

gadolinium complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-benzyloxymethylundecanedioic acid or a physiologically acceptable salt thereof;

gadolinium complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-(4-carboxymethoxybenzyl)undecanedioic acid or a physiologically acceptable salt thereof;

gadolinium complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-(4-ethoxybenzyl)undecanedioic acid or a physiologically acceptable salt thereof;

europium complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-(4-ethoxybenzyl)undecanedioic acid or a physiologically acceptable salt thereof;

iron complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-(4-ethoxybenzyl)undecanedioic acid or a physiologically acceptable salt thereof;

gadolinium complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-(4-butoxybenzyl)undecanedioic acid or a physiologically acceptable salt thereof;

europium complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-(4-butoxybenzyl)undecanedioic acid or a physiologically acceptable salt thereof;

iron complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-(4-butoxybenzyl)undecanedioic acid or a physiologically acceptable salt thereof;

gadolinium complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-(4-benzyloxybenzyl)undecanedioic acid or a physiologically acceptable salt thereof;

europium complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-(4-benzyloxybenzyl)undecanedioic acid or a physiologically acceptable salt thereof;

iron complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-(4-benzyloxybenzyl)undecanedioic acid or a physiologically acceptable salt thereof [each a compound of claim 1].

11. (Amended.) A method of enhancing an NMR image comprising administering ~~to a~~ patient a compound of claim 1, wherein at least [one] two X [is] groups represent a metal ion of atomic number 21-29, 42, 44 or 58-70.

~~**12. (Amended.)** A method of enhancing an X-ray image~~ comprising administering to a patient a compound of claim 1, wherein at least [one] two X [is] groups represent a metal ion ~~of atomic number 21-29, 42, 44 or 57-83.~~

Claim 16, line 15: Change "57-83," to -- 58-70, --.

Please add the following new claims:

17. A compound according to claim 1, wherein at least two of the X groups represent a metal ion of atomic number 21-29, 42, 44 or 58-70.

F 14 18. A method ~~compound~~ according to claim 11 1, wherein two of the X groups represent manganese(II), iron(II), cobalt(II) or copper(II); or three of the X groups represent chromium(III), praseodymium(III), neodymium(III), samarium(III), ytterbium(III), gadolinium(III), terbium(III), dysprosium(III), holmium(III), erbium(III), or iron(III).

F 15 19. A method ~~compound~~ according to claim 11 1, wherein Z^1 is $-C_6H_4-O-C_2H_5$ or $-C_2H_4-C_6H_4-O-C_2H_5$.

F 16 20. A method ~~compound~~ according to claim 11 1, wherein said compound is gadolinium complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-(4-ethoxyphenyl)undecanedioic acid or a physiologically acceptable salt thereof.

A4 Cont. F 17 21. A method ~~compound~~ according to claim 11 1, wherein said compound is a complex of 3,6,9-triaza-3,6,9-tris(carboxymethyl)-4-(4-ethoxyphenylethyl)undecanedioic acid and a metal ion of atomic number 21-29, 42, 44 or 57-83, or a physiologically acceptable salt thereof.

F 18 22. A method ~~compound~~ according to claim 11 1, wherein R is C_{1-6}-alkyl or C_{1-6}-alkyl substituted by $-OR^1$.

F 19 23. A method ~~compound~~ according to claim 11 1, wherein one of Z^1 and Z^2 is $-CH_2-C_6H_4-O-(CH_2)_n-(C_6H_4)_1-(O)_r-R$.

F 20 24. A method ~~compound~~ according to claim 11 1, wherein one of Z^1 and Z^2 is $-(CH_2)_m-C_6H_4-O-CH_2-C_6H_4-(O)_r-R$.

F 21 25. A method ~~compound~~ according to claim 11 1, wherein the X groups which do not represent a metal ion equivalent of atomic number 21-29, 42, 44 or 57-83 are individually lithium, potassium or sodium, or two such X groups are calcium or magnesium.

F 22 26. A method ~~compound~~ according to claim 11 1, wherein X groups which are not a metal ion equivalent of an element of atomic number 21-29, 42, 44 or 57-83 represent a salt with ethanolamine, diethanolamine, morpholine, glucamine, N,N-dimethyl-

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